UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,435	05/20/2000	CHRISTINE PECINA	102689-17	8683

21125 7590 01/13/2005

NUTTER MCCLENNEN & FISH LLP
WORLD TRADE CENTER WEST
155 SEAPORT BOULEVARD
BOSTON, MA 02210-2604

EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
2143	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/574,435	PECINA, CHRISTINE	
	Examiner	Art Unit	
	Joseph E. Avellino	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6 and 8-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6 and 8-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3-6, 8-18 are presented for examination.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (USPN 6,405,250) (hereinafter Lin).

3. Referring to claim 1, Lin discloses a network device comprising:

an internal configuration database process (management agent) for managing configuration of internal resources within the network device in response to configuration input provided by an external Network Management System (NMS) process (e.g. abstract; Figures 1-8; col. 7, lines 27-50);

a plurality of modular processes that communicate with the configuration database to access configuration data, wherein the processes use the configuration data to modify execution behavior (execution policies) (col. 8, line 39 to col. 9, line 50);

a database maintained by said external NMS for storing a copy of data contained in said internal configuration database (Figure 4, ref. 401); and

wherein the configuration database supports an active query feature and the NMS database is configured to establish an active query for all records within the

configuration database to synchronize the NMS database with the embedded database (col. 8, lines 44-48; Figures 1-8).

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3-6, 8, 9, and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim in view of Krishnamurthy et al. (USPN 6,389,464) (hereinafter Krishnamurthy).

5. Referring to claim 3, Lin discloses a communications system, comprising:

a network device comprising:

an internal configuration database process for managing configuration of internal resources within the network device (e.g. abstract; Figures 1-8; col. 7, lines 27-50).

a computer system comprising:

a trend analyzer and an action chooser to receive information from the network element and, based on previous performance, determine a best course of action to reconfigure the network element (e.g. abstract; Figures 1-8; col. 7, line 51 to col. 8, line 2; col. 8, lines 39-55);

a Network Management System (NMS) process for responding to the configuration data and for sending configuration data to the configuration database process within the network device (col. 7, line 51 to col. 8, line 2);

wherein the configuration database process within the network device configures internal resources of the network device in response to the configuration data received from the NMS (col. 7, line 27 to col. 8, line 55).

The system taught by Lim does not necessarily disclose an input mechanism for receiving configuration input data from a network manager, however Krishnamurthy discloses an input mechanism for receiving configuration input data from a network manager over the Internet using standard HTTP and HTML protocols (Figures 4-29). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Krishnamurthy with Lim to allow a system administrator to customize the network as necessitated by new upgrades to the system while leaving the automated processes of monitoring and configuring based on thresholds to the network monitoring system.

6. Referring to claim 4, Lin discloses an internal NMS database process for tracking configuration information stored by the configuration database within the network device (col. 7, lines 27-50).

7. Referring to claim 5, Lin discloses for any change to the configuration data stored by the configuration database, the configuration database sends a notification of the

change to the NMS database within the computer system to synchronize the NMS database with the configuration database (col. 7, line 51 to col. 8, line 2; col. 8, lines 39-55).

8. Referring to claim 6, Lin discloses the change notification sent to the NMS database by the configuration database includes data representing the change to the configuration data (col. 7, lines 36-50; col. 8, lines 23-28, 44-48).

9. Referring to claim 8, Lin discloses a communications system as stated in the claims above. Lin does not disclose the NMS process communicates with the configuration database through a standard database protocol. Krishnamurthy discloses the database synchronization process communicates with the configuration database through a standard database protocol (SQL) (e.g. abstract). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Krishnamurthy with Lin to provide for reduced complexity of the system while allowing for the use of standardized components to interface with the database system.

10. Referring to claim 9, Lin-Krishnamurthy disclose a communications system as stated in the claims above, however the system does not specify the NMS process communicates with the NMS database through the standard database protocol, however, it is suggested by the prior art that it would have been obvious to one of

ordinary skill in the art at the time the invention was made to modify the system of Lin-Krishnamurthy to communicate with the NMS database through the standard database protocol to provide for reduced complexity of the system while allowing for the ease of future upgrades or replacements.

11. Referring to claim 11, Lin discloses a communications system as stated in the claims above. Lin does not necessarily disclose that the computer system comprises a workstation, however, it is suggested that Lin that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a workstation to the computer system to allow the system to effectively monitor that particular element as part of the system.

12. Referring to claim 12, Lin discloses a communications system as stated in the claims above. Lin does not disclose that the computer system comprises a personal computer. Krishnamurthy disclose a computer system which comprises a personal computer (col. 4, lines 1-7). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Krishnamurthy with Lin to allow a system administrator to customize the network as necessitated by new upgrades to the system while leaving the automated processes of monitoring and configuring based on thresholds to the network monitoring system.

13. Referring to claim 13, Lin discloses a communications system as stated in the claims above. Lin does not disclose the network device is a switch. Krishnamurthy disclose a network monitoring/management system which monitors the performance of a network switch (e.g. abstract; col. 4, lines 20-27). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Krishnamurthy with Lin to allow a system administrator to customize the network as necessitated by new upgrades to the system while leaving the automated processes of monitoring and configuring based on thresholds to the network monitoring system.

14. Referring to claim 14, Lin discloses the network device is a router (col. 3, line 1).

15. Referring to claim 15, Lin-Krishnamurthy discloses a communications system as stated in the claims above. Lin-Krishnamurthy do not disclose that the network device is a hybrid switch-router, however it is suggested by the prior art that it would have been obvious to one of ordinary skill to provide that the network device is a hybrid switch-router to allow more connectivity between network devices, allowing more integration of network elements support systems.

16. Claims 16-18 are rejected for similar reasons as stated above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lim in view of Krishnamurthy in view of Sampson et al. (USPN 6,490,624) (hereinafter Sampson).

17. Lim in view of Krishnamurthy disclose a communications system as stated in the claims above. Lim in view of Krishnamurthy do not disclose that the standard database protocol is the JDBC protocol. Sampson discloses accessing a database using the JDBC protocol (col. 9, lines 45-51). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Sampson with Lim and Krishnamurthy to allow a client to securely interact with a plurality of access servers as supported by Sampson (e.g. abstract).

Response to Amendment

18. The Office acknowledges the amendments to claims 1, 3, 4, 16, 18 and the cancellation of claims 2, 7, and 19, whose limitations have been incorporated into the independent claims.

Response to Arguments

19. Applicant's arguments filed October 6, 2004 have been fully considered but they are not persuasive.

20. In the remarks, Applicant argues, in substance, that (1) the databases in Lin maintained by the NMS and the NE's contain transition model data and not configuration data for configuring the NE's, (2) Lin does not disclose using an active query feature for all records in order to synchronize the NMS database with the internal database, (3) Krishnamurthy dose not disclose synchronizing an internal database with another database using an active query feature.

21. As to point (1) the Office takes the term "configuration data" to mean data which can be used to modify the execution behavior of the device. Lin discloses that the action chooser 403 selects management actions for relevant NE's based on the obtions associated with the states of the device, and then the device carries out these commands. The nature of these requests include *reconfiguring* the network element, acquiring specific MIB values, or updating report filtering policies (col. 7, lines 47-67). The action chooser 403 is part of the NMS and reconfigures the network element and modifies its execution behavior. By this rationale the rejection is maintained.

22. As to point (2) the Office takes the term "active query" to be broadly construed as "repeatedly requesting information from the network element". Lin discloses gathering status information using triggers either by the requestor or sender using periodically based timeout events (col. 6, lines 12-24). By this rationale, the rejection is maintained since Lin's database actively queries the NE (col. 6, line 23).

23. As to point (3) the Office is not relying upon the Krishnamurthy reference to reject this limitation, rather the Lin reference. See above rejections.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

26. Malik et al. (USPN 5,832,503) discloses configuration management in communcation networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

JEA
January 10, 2005

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100